

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,871	03/14/2001	Ben Folk-Williams	M-11459 US 3400	
7:	590 04/28/2003			
HAMILTON & TERRILE, LLP			EXAMINER	
P.O. BOX 203518 AUSTIN, TX 78720			THAI, HANH B	
			ART UNIT	PAPER NUMBER
		•	2171	f.
			DATE MAILED: 04/28/2003	$\sim$

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application No.	Applicant(s)			
		09/805,871	FOLK-WILLIAMS ET AL.			
		Examiner	Art Unit			
		Hanh B Thai	2171			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status 1)⊠	Responsive to communication(s) filed on 14 M	larch 2001				
2a)□		s action is non-final.				
3)	<del>/-</del>					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. <b>Disposition of Claims</b>						
4)⊠ Claim(s) <u>1-51</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
	5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-51</u> is/are rejected.						
·	7)☐ Claim(s) is/are objected to.					
	Claim(s) are subject to restriction and/or	election requirement.				
Application Papers						
9)[] 7	The specification is objected to by the Examiner		,			
10)⊠ The drawing(s) filed on <u>28 June 2001</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)[] 7	The proposed drawing correction filed on		proved by the Examiner.			
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
<ul> <li>a) ☐ The translation of the foreign language provisional application has been received.</li> <li>15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</li> </ul>						
Attachment(s)						
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Inform	ary (PTO-413) Paper No(s) al Patent Application (PTO-152)			
S Datest and Tre	1 .00					

Art Unit: 2171

This is in response to the application filed March 14, 2001 in which claims 1-51 are presented for examination.

#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

35 U.S.C. § 102(e), as revised by the AIPA and H.R. 2215, applies to all qualifying references, except when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. For such patents, the prior art date is determined under 35 U.S.C. § 102(e) as it existed prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. § 102(e)).

Claims 1-8, 16-28, 32-36, 38-45, 49-50 are rejected under 35 U.S.C. 102(e) as being anticipated by Chang et al. (U. S. Patent no. 6,061,515).

- 1. Regarding claims 1, 21 and 38, Chang discloses a method of managing a computer database, comprising the steps of:
  - importing data into a database residing on a computer system (see Fig.4 and col.5, lines 51-56, Chang);

- constructing a schema object to represent a schema of the database (see col.9, lines 46-48, Chang); and

- manipulating the database using an aggregate classifier based on the schema object (see col.9, lines 57-65, Chang). The Schema in the object oriented system of Chang is a part of object system and it inherently has to be a schema object of the system.

Regarding claims 2, 22 and 39 The method of Claim 1 wherein said constructing step includes the steps of: defining a plurality of classifier definitions corresponding to the schema of the database; and mapping the classifier definitions to columns and tables in the database (see col. 11, lines 49-63, Chang).

- 2. Regarding claims 3-4, 23-24 and 40-41, Chang further discloses the defining step defines a "property" classifier which interacts with a single column on a single table in the database (see col. 2, lines 36-39, Chang).
- 3. Regarding claims 5-6, 25-26 and 42-44, Chang further discloses the defining step defines a "split-object" classifier that makes more than one "object" classifier appear as a single classifier (see Fig. 8, Chang).
- 4. Regarding claims 7 and 27, Chang further discloses defining step defines a "mapped property" classifier as a special form of the "split-object" classifier to manage data stored in a table of the database that serves as an index to another database table (see Fig.9 and col.3, lines 28-38, Chang).
- 5. Regarding claims 8, 28 and 45, Chang further discloses the defining step defines a parameterized classifier (see col25, lines 25-36, Chang).

Art Unit: 2171

- 6. Regarding claims 16-19 and 32-35, Chang further discloses the manipulating step includes the step of generating a SQL INSERT, UPDATE, DELETE query using the query generator (see col.10, lines 24-25 and col. 38, lines 15-67, Chang).
- 7. Regarding claims 20 and 36, Chang further discloses the step of an aggregate classifier interrogating the schema object to determine how different classifiers correspond to columns and tables in the database (see col. 31, lines 26-39, Chang).
- 8. Regarding claims 49, Chang further discloses the program instructions generate a search query using the schema object (see col. 2, lines 40-55, Chang).
- 9. Regarding claims 50, Chang further discloses the schema object to determine locations of different classifiers in the database (see col.2, lines 56-60 and col.4, lines 22-26, Chang).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 9, 29, 37, 46 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (U. S. Patent no. 6,061,515) in view of Sarkar (U.S. Patent no. 6,012067).

10. Regarding claims 9, 29, 37, 46 and 51, Chang further discloses modifying the schema of the database (see col. 18, lines 2-8, Chang). Chang, however, does not disclose constructing a schema object. Sarkar, on the other hand, discloses this limitation (see Abstract, Sarkar). It

Art Unit: 2171

would have been obvious to one of ordinary skill in the art at the time of the invention to modify
Chang to include the step of constructing a schema object as taught by Sarkar. The motivation of
doing so would have been to manipulate the object definitions at multiple locations on the web.

Claims 11, 13-15, 31 and 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (U. S. Patent no. 6,061,515) in view of Carey et al. (U.S. Patent 6,134,540).

- Regarding claims 11, 13, 31 and 47-48, Chang discloses all of the claimed subject matter as discussed above, except Chang does not disclose the step of writing or re-writing classification definitions stored on the computer system. Carey, however, discloses this limitation (see Abstract, col.5, lines 31-52, Carey). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Chang to include the step of rewriting techniques as taught by Carey. The motivation of doing so would have been to minimize the building of objects in the memory of the object query service.
- 12. Regarding claims 14, Chang/Carey combination discloses the step parses an import file to import the data (see 240, Fig. 1 and Fig. 2, Chang).
- 13. Regarding claims 15, Chang/Carey combination discloses the step of an application, residing on the computer system, interacting with a composite object included in the classification definitions (see col. 10, lines 35-43, Chang).

Art Unit: 2171

Claims 10, 12 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (U. S. Patent no. 6,061,515) in view of Sarkar (U.S. Patent no. 6,012067) and further view of Carey et al. (U.S. Patent 6,134,540).

- 14. Regarding claims 10 and 30, Chang/Sarkar combination discloses all of the claimed subject matter as discussed above, except Chang and Sarkar does not disclose the step of writing or re-writing classification definitions stored on the computer system. Carey, however, discloses this limitation (see Abstract, col.5, lines 31-52, Carey). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Chang/Sarkar to include the step of rewriting techniques as taught by Carey. The motivation of doing so would have been to minimize the building of objects in the memory of the object query service.
- 15. Regarding claim 12, Chang/Sarkar/Carey combination discloses Chang/Sarkar writing step uses XML (col. 2, lines 1-6, Sarkar).

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh B Thai whose telephone number is 703-305-4883. The examiner can normally be reached on 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-9099 for regular communications and 703-746-7240 for After Final communications.

Art Unit: 2171

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Hanh Thai My Art Unit 2171 April 23, 2003

> SAFET METJAHIC SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100